

Name \_\_\_\_\_

Date \_\_\_\_\_

Class \_\_\_\_\_

**Chapter 15: The Theory of Evolution**

**Section 15.1 Natural Selection and the Evidence for Evolution**

In your textbook, read about natural selection and adaptations.

**Identify the type of structural adaptation that the statement describes. If the statement applies to both, write both. Use these choices: mimicry, camouflage, both.**

- \_\_\_\_\_ 1. Enable(s) an organism to blend in with its surroundings.
- \_\_\_\_\_ 2. Provide(s) protection for an organism by copying the appearance of another species
- \_\_\_\_\_ 3. The coloration of a flounder that allows the fish to avoid predators.
- \_\_\_\_\_ 4. Involve(s) changes to the external appearance of an organism
- \_\_\_\_\_ 5. A flower that looks like a female bee.

**Section 15.2 Mechanisms of Evolution**

In your textbook, read about population genetics and evolution

**Determine if the statement is true. If it is not, rewrite the italicized part to make it true**

- 6. Adaptations of species are determined by the genes contained in the DNA code.  
\_\_\_\_\_
- 7. When Charles Mendel developed the theory of natural selection in the 1800s, he did not include a genetic explanation. \_\_\_\_\_
- 8. Natural selection can act upon an individual's genotype, the external expression of genes. \_\_\_\_\_
- 9. Natural selection operates on an individual over many generations.  
\_\_\_\_\_
- 10. The entire collection of genes among a population is its gene frequency.  
\_\_\_\_\_
- 11. If you know the phenotypes of all the organisms in a population, you can calculate the allelic frequency of the population. \_\_\_\_\_
- 12. A population in which frequency of alleles changes from generation to generation is said to be in genetic equilibrium. \_\_\_\_\_